

SECTION TWO

Selecting Wastes and Collection Methods

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hen initiating a collection program, the planning committee must decide who may bring wastes to the collection, what types and quantities of waste will be accepted, and how the waste will be collected.

Decide Who May Bring Wastes to the Collection Program

Most collections are limited to wastes generated by individuals at home and exclude hazardous waste from commercial and institutional generators. This is primarily because programs are expensive, averaging \$100 per participant. In addition, by limiting the number of participants it is possible to limit the amount of wastes (although it also reduces effectiveness).

Some HHW collections, however, are open to small businesses that are “conditionally exempt small quantity generators” (CESQGs) of hazardous waste (see Appendix A). Examples of businesses and institutions that might be considered CESQGs under certain circumstances include florists, home repair businesses, gas stations, and schools. CESQGs often are unaware that they produce hazardous waste, and so sometimes store and dispose of wastes improperly. A HHW program that includes these generators can educate them about environmentally sound ways to manage their hazardous waste. Requirements that must be followed if a HHW collection program accepts wastes from these small businesses are explained in Appendix A. These generators usually are charged based on the cost of managing their wastes. The charge for CESQG waste is less than what generators would pay if they managed the waste themselves.

Decide What Types Of HHW to Accept

The two types of waste received most often at HHW collections are used motor oil and paint. Pesticides usually are the third largest category. Programs also receive significant numbers of car batteries. Over the next few years, the types of wastes collected might begin to change, and the volume of certain types of HHW will probably decrease. For example, the proportion of latex paint compared to oil-based paint will probably increase since sales of oil-based paint have been decreasing. It will take a long time, however, to remove stored materials from all the homes in a community. (In San Bernardino County, California, for example, the paint brought to HHW collections is an average of 10 years old.)

To minimize costs, some programs target only specific recyclable HHW, such as used oil, car batteries, antifreeze, and latex paint. In addition, HHW collections often exclude certain wastes that the contractor is not licensed to receive or does not have the necessary equipment to identify or handle. Certain wastes also might be excluded if the TSDF will not accept them. Frequently excluded wastes include garbage, asbestos, dioxin-bearing wastes, explosives, radioactive such as smoke detectors, and unlabeled or unknown wastes. Most programs also exclude medical wastes. In New Jersey, however, some programs have begun to collect medical waste using a hauler licensed to handle such wastes.

Decide Whether to Limit the Amount Of HHW

A few programs limit the amount of HHW that each participant may bring to the collection. For example, some collections impose a five-gallon or 50-pound limit per participant, while others limit the size of the containers. This practice holds down collection-day costs. Limits can also prevent CESQs or small quantity generators (SQGs) (see Appendix A) from bringing wastes to the collection, if that is a goal of the program. In some states, limits on the amount of HHW are set by law. In addition, state permits for one-day collections or program contracts may forbid overnight storage of the hazardous waste. Amounts, therefore, might need to be limited so that all wastes can be properly packaged before the end of the day.

Programs accepting waste from small businesses (CESQs only) might limit amounts accepted or charge a participation fee so that the program will not be overwhelmed by disposal costs. Allowing drop-off "by appointment only" will prevent the collection site from being overwhelmed by too many CESQs.

Select a Collection Method

To maximize participation, many communities are experimenting with a variety of collection methods. Some use a combination of collection methods. Common collection methods include one-day, permanent facility, mobile facility, door-to-door pickup, curbside, and point-of-purchase. Although this manual focuses on one-day drop-off programs, the next section briefly introduces each of the major types of HHW collection programs.

One-Day Drop-Off

Most communities begin HHW programs with one-day, one-site events at which residents drop off their HHW. The events usually are scheduled in the spring or fall; participation during other seasons is limited by summer vacations and winter weather in much of the country. One-day drop-off collections typically are held on Saturday, without appointments, starting in the morning and ending in the afternoon.

A potential limitation of drop-off programs is finding a date for the collection on which the hazardous waste contractor will



be available. It is important to confirm the date with the contractor as early as possible (six months in advance is recommended), especially if HHW collections are scheduled on the weekend. Weekend HHW collections in the spring and fall are very popular, and these dates fill up quickly.

Another potential limitation of one-day programs is that the chosen day might not be convenient for some residents. To address this concern, some communities hold drop-off collections on more than one day—for example, a Saturday and Sunday—or on two successive weekends. The selected HHW collection date(s) should not conflict with other major events in the community. Holding collections in more than one location within the community also can increase participation.

Still another potential limitation is that participants sometimes must wait an hour or more to drop off their wastes. Organizers of drop-off collection events need to plan ways to avoid long waits. Strategies for reducing waiting time include using express lanes for certain wastes (see Section 7), holding the collection in several different locations, holding the collection over several days, and implementing a two-phase program (for example, accepting paint and oil one day and other wastes the next).

Permanent Drop-Off

If the limitations of one-day collections prove too great, a community might want to consider instituting a permanent drop-off program. The community must anticipate a number of needs that accompany permanent drop-off programs, including:

- Managing the increased annual quantity of HHW and increased participation rates.
- Ongoing public education and publicity.
- A facility for onsite storage of HHW.

- Training local staff to perform many of the responsibilities usually assumed by the hazardous waste contractor at one-day collections.
- An institutionalized, predictable funding source.
- Compliance with additional state and local regulatory requirements that might apply to permanent programs.

Permanent programs require a larger upfront investment than one-day collections, but they probably will reduce costs per participant for the community in the long run. For example, communities generally use their own employees instead of contractors, often resulting in lower costs.

Drop-Off at a Mobile Facility

Most surveys show that the average collection day participant travels five miles or less to the site. Sponsors can purchase a mobile facility and equipment to provide periodic collections on a regular schedule at different sites within a county or large community. This is an effective method for providing service to geographically large and diverse regions. Like permanent programs, these mobile collection programs might cost more than one-day programs in the beginning, but they probably will reduce costs per participant over the long term.

Door-to-Door Pickup

Door-to-door pickup by appointment is expensive, but it is more convenient for participants than drop-off. The personnel who collect materials must be trained in handling hazardous waste, including how to pack and separate the waste in the collection vehicle. It also allows participation by housebound individuals and others who cannot travel to a collection site. Sometimes the programs

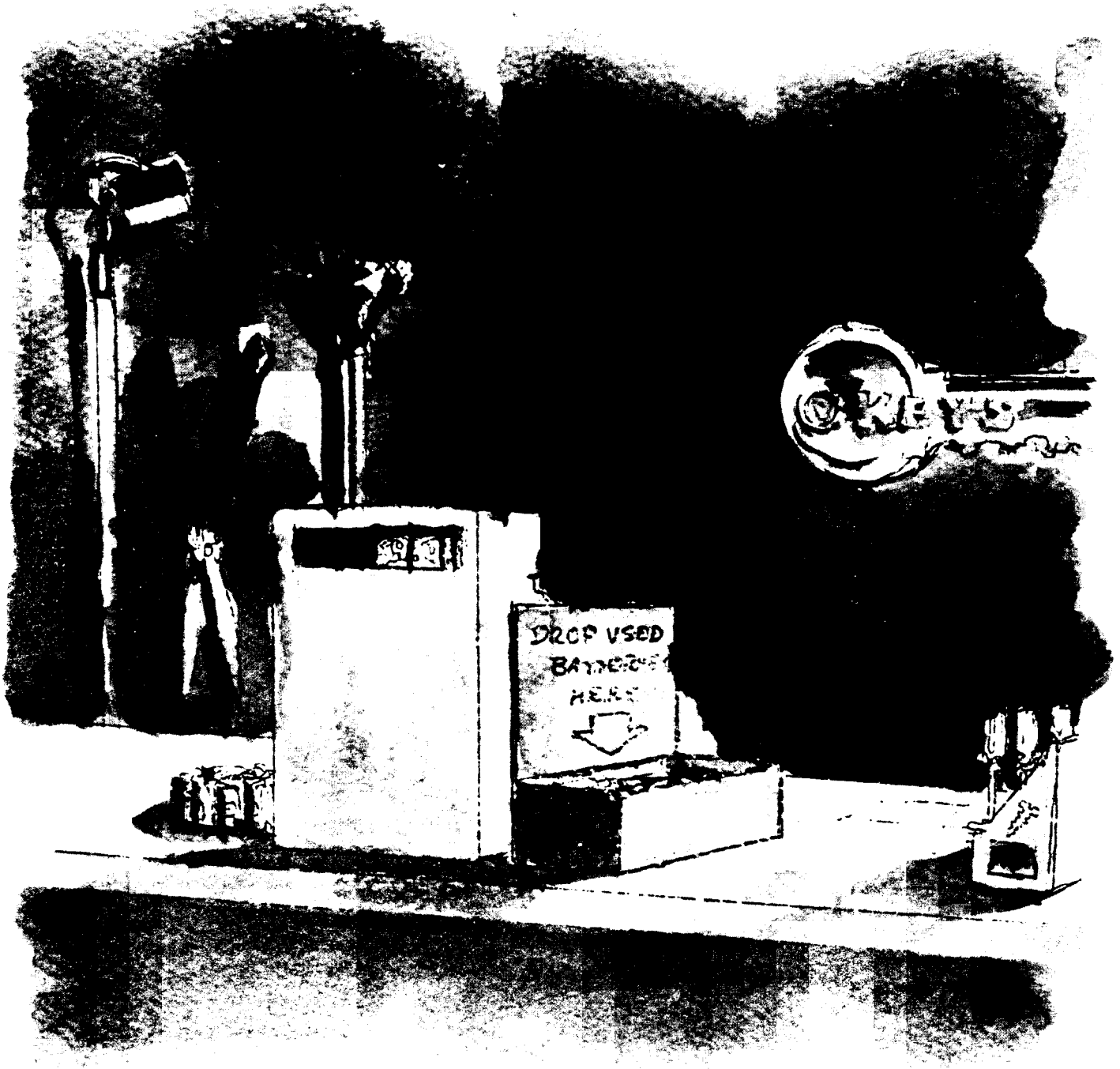
are offered to certain individuals in addition to the one-day event.

Curbside Collection

Curbside programs usually are limited to a few selected wastes collected from households on a regularly scheduled basis. Restrictions on the types of waste are necessary

because leaving highly toxic or incompatible wastes at the curb can be dangerous, and because collecting and transporting a variety of hazardous materials in residential neighborhoods presents logistical difficulties.

The most common type of waste collected at curbside is used oil. More than 115 communities have set up programs to



collect recyclable used oil at curbside. Other communities collect household batteries and paint at curbside.

Point of Purchase

In some communities, a few types of HHW can be returned to retail stores. community HHW program planners can publicize these point-of-purchase programs as part of an overall HHW management strategy.

Retailers have implemented some point-of-purchase programs voluntarily. in New Hampshire and Vermont for example, some hardware and jewelry stores collect customers' spent household batteries in buckets or specially designed cardboard boxes.

In addition, several states require that certain retailers take back some types of HHW. In Massachusetts and New York, for example, retailers must take back automobile batteries and used motor oil. Regulations in Connecticut, Minnesota, and Oregon ban car batteries and used oil from landfills and/or require deposits and retailer redemption.

Regulations regarding proofs of purchase, deposits, and surcharges for returns are different in each state. Massachusetts used oil law, for example, requires proof of purchase. Auto battery regulations usually require retailers to post a notice informing customers that they may return their batteries and stating how many may be returned at one time.